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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/800,800	03/07/2001	Hiroto Yoshioka	55661(904)	9944

21874 7590 04/03/2003

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EXAMINER

CHIN, RANDALL E

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 04/03/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicati n No.

09/800,800

Applicant(s)

YOSHIOKA ET AL.

Examiner

Randall Chin

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 2,8 and 13-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-7 and 9-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2, 3, 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Claims 13-35 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper Nos. 6 and 10.
2. Applicant's election with traverse of species 1, Fig.1, claims 1-12 in Paper No. 10 is acknowledged. The traversal is on the ground(s) that Figs. 1 and 2 differ with respect to the transport means. Applicant asserts that Fig.2 includes rotation drive means (an arm rotation mechanism 13) which is just a substitute for transport means. This is not found persuasive because Applicant has not traversed on the ground that the species of Figs. 1 and 2 are not patentably distinct.

The requirement is still deemed proper and is therefore made FINAL.

Claims 2 and 8, indicated by Applicant as readable on the elected species of Fig.1, have been withdrawn from consideration since claim 2 recites that the cleaning agent supply means for supplying "the aqueous cleaning agent onto the surface of the object to be cleaned on a side of said scrubbing means" and is not disclosed in elected Fig.1. It should be noted that Fig.1 appears to represent reference numeral 12 which is "aqueous cleaning agent" within the ultrasonic nozzle 2 and is not on the side of the scrubbing means.

***Information Disclosure Statement***

3. A copy of Japan 09-241351 is respectfully requested in the next submission since this reference is not in the file and has not been considered. It was listed in the IDS filed June 8, 2001.

***Specification***

4. The disclosure is objected to because of the following informalities: On p.18, line 20, viewing Fig.1 it is unclear how core member 1a is positioned "vertical" to the substrate. The same concern holds for p.23, line 7. Similarly, on p.23, line 15, viewing Fig.1 it is not clear how the direction "vertical" comes into play with respect to the transport direction of the substrate 10. On p.29, lines 3-4, the recitation "having a rotation mechanism of rotating" is awkwardly written.

It is not exactly clear as to where exactly the spray nozzle is for the ultrasonic nozzle 2 shown in elected Fig.1. The specification at p.20, lines 9-15 recites that cleaning agent 12 is sprayed from its "leading end", however, it is unclear how the nozzle blows cleaning agent at its leading end towards the back or lower surface of the substrate 10 given the orientation of the nozzle 2 shown in Fig.1 which appears to point downwards. Clarification is respectfully requested here.

Appropriate correction is required.

***Drawings***

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the disk brush as

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recited in claim 6 and the belt conveyor as recited in claim 12 must be shown or the feature(s) canceled from the claim(s). **No new matter should be entered.**

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

6. Claim 11, line 3, it appears "is" should read —are—for grammatical reasons.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 3, 7, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Taiwan 341534.

As well as claim 1 is understood, Taiwan 341534 discloses all of the recited subject matter as shown by Figs.2 or 3. The "scrubbing means" (spray) 2 or 44 is opposed to ultrasonic wave projection means 23, 25, 29 or 31, 34, 36. As for claim 3, there would appear to be some type of transporting means for transporting the object 31 or 32 to be cleaned.

9. Claims 1, 3, 11, 4, 6, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Japan 06-005577.

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As well as claim 1 is understood, Japan 06-005577 teaches ultrasonic wave projection means for supplying an aqueous cleaning agent against the surface of the object to be cleaned and generating an ultrasonic wave defined by nozzle in the bottom of the tank 1 in conjunction with ultrasonic wave oscillator 7 shown in Fig.1.. Clearly, substrate 12 is set between the scrubbing means 6 and the ultrasonic wave projection means.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 06-005577.

As for claim 5, it is the Examiner's position that whether the cleaning brush is a disk brush or roll brush is an obvious design matter to one of ordinary skill in the art and may depend on desired cleaning characteristics of the substrate or for pure economical reasons. For similar reasons, the use of transport rollers or belt conveyor as recited by claim 12 is another design choice which may depend on design characteristics or economic reasons. Whether the substrate is transported by rollers or belt conveyor is not deemed to define patentable subject matter.

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**Conclusi n**

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Tanoue, Kubota, Tanaka, Hirose, Sato and Konishi are pertinent to various substrate cleaners utilizing ultrasonic cleaning arrangements.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randall Chin whose telephone number is (703) 308-1613. The examiner can normally be reached on Monday through Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Warden can be reached on (703) 308-2920. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Randall Chin  
Primary Examiner  
Art Unit 1744